Ira Graffman maintains 3 sets of interstate/state highway map backgrounds on NOAA1. The 3 sets of interstate/state highway map backgrounds on NOAA1 are:

Set 1: ri11oc01.dbf, ri11oc01.shp.Z and ri11oc01.shx files - The ri11oc01.(dbf|shp.Z|shx) set of map background files on NOAA1 is an updated set of the original AWIPS /data/fxa/nationalData/us_inter.(dbf|shp|shx) interstate map background files. Most AWIPS systems are using the us_inter.(dbf|shp|shx) interstate map background files which were originally delivered with AWIPS. The only difference between the original us_inter.(dbf|shp|shx) map backgrounds and the ri11oc01.(dbf|shp.Z|shx) is that 2 omitted highways in Alaska were added. Based upon the file name for this set of map backgrounds, ri**11oc01**, these map backgrounds were last updated on October 11, 2001.

Set 2: in15oc03.dbf, in15oc03.shp.Z and in15oc03.shx files - The in15oc03.(dbf|shp.Z|shx) set of map background files on NOAA1 is a map of the free access highways (toll free highways). The in15oc03.(dbf|shp.Z|shx) set of map background files contains not only the interstate highways which are in the ri11oc01.(dbf|shp.Z|shx) set of map background files but it also contains all of the toll free state highways. The drawback of this set of map backgrounds is that many of the highways can look fragmented as the highway switches between toll free segments (which are drawn) and toll segments (which are not drawn). Based upon the file name for this set of map backgrounds, in**15oc03**, these map backgrounds were last updated on October 15, 2003.

Set 3: rd15oc03.dbf, rd15oc03.shp.Z and rd15oc03.shx files - The rd15oc03.(dbf|shp.Z|shx) set of map background files on NOAA1 contains both the free access highways and the toll roads. Of the 3 sets of map backgrounds, this is the most detailed because it contains all of the Interstate, US Highways and State Roads. Based upon the file name for this set of map backgrounds, rd**15oc03**, these map backgrounds were last updated on October 15, 2003.

The ri11oc01.(dbf|shp.Z|shx) set or the in15oc03.(dbf|shp.Z|shx) set of files are the easiest to install since both these sets of map backgrounds are simply replacements to the existing /data/fxa/nationalData/us_inter.(dbf|shp.Z|shx) interstate map background files. Either the ri11oc01.(dbf|shp.Z|shx) set or the in15oc03.(dbf|shp.Z|shx) set of files can be used to upgrade the existing us_inter.(dbf|shp.Z|shx) interstate map background files. The downloaded files from NOAA1 simply need to be copied into the existing us_inter.(dbf|shp.Z|shx) files. Once the updated us_inter.(dbf|shp.Z|shx) files are installed, run a **./mainScript.csh +maps** localization on each workstation to create an updated /awips/fxa/data/localizationDataSets/LLL/interstate.bcx file.

It looks like there was an attempt to include the rd15oc03.(dbf|shp.Z|shx) sets of map background files into the AWIPS baseline configuration files but in its current configuration, the baseline configuration files and localization scripts will not allow these map backgrounds to be added.

Rather than telling everyone how to fix the baseline configuration files and fix the makeMapFiles.csh localization script, I will just demonstrate how to add the more detailed rd15oc03.(dbf|shp.Z|shx) sets of map background files into AWIPS as a locally configured map.

***** Updating the /data/fxa/nationalData/us_inter.(dbf|shp.Z|shx) set of interstate map background files *****

Most AWIPS sites are using the interstate highway map backgrounds which were originally delivered with AWIPS. On October 11, 2001, Ira Graffman made available updated interstate highway map backgrounds. The following procedure describes how these baseline map backgrounds can be updated with the ri11oc01.(dbf|shp.Z|shx) files. The file names on NOAA1 versus the file names on AWIPS are:

File name on NOAA1   **File name on AWIPS**
/pub/maps/**ri11oc01.dbf**   /data/fxa/nationalData/**us_inter.dbf**
/pub/maps/**ri11oc01.shp.Z**   /data/fxa/nationalData/**us_inter.shp.Z**
/pub/maps/**ri11oc01.shx**   /data/fxa/nationalData/**us_inter.shx**

Alternatively, the in15oc03.(dbf|shp.Z|shx) set of files could also be used to update the originally delivered AWIPS interstate highway map background files. If you wish to install the in15oc03.(dbf|shp.Z|shx) set of files instead of the ri11oc01.(dbf|shp.Z|shx) set of files, use the following instructions and wherever the word ri11oc01 is mentioned, substitute the word in15oc03. The file names on NOAA1 versus the file names on AWIPS are:

File name on NOAA1   **File name on AWIPS**
/pub/maps/**in15oc03.dbf**   /data/fxa/nationalData/**us_inter.dbf**
/pub/maps/**in15oc03.shp.Z**   /data/fxa/nationalData/**us_inter.shp.Z**
/pub/maps/**in15oc03.shx**   /data/fxa/nationalData/**us_inter.shx**

☐....1. Log into the **ds1** server as the **fxa** user. Change directories to the /data/fxa/nationalData directory by entering the command:

cd /data/fxa/nationalData

☐....2. Save the original us_inter.(dbf|shp|shx) files by entering the commands:

mv us_inter.dbf   us_inter.dbf.orig
mv us_inter.shp   us_inter.shp.orig
mv us_inter.shx   us_inter.shx.orig

☐....3. Ftp to NOAA1 and get the replacement ri11oc01.(dbf|shp.Z|shx) set of map background files by entering the command:

ftp 165.92.25.15

At the ftp login prompt, login using the **ftp** name and then use your email address as the password. Once you are successfully logged into NOAA1 and you have the **ftp>** prompt, enter the following commands:

cd /pub/maps
binary
mget ri11oc01.*
bye

☐....4. Move the replacement ri11oc01.(dbf|shp.Z|shx) set of map background files into place by entering the commands:

chown fxa:fxalpha ri11oc01.*
chmod 664 ri11oc01.*
mv ri11oc01.dbf   us_inter.dbf
mv ri11oc01.shp.Z us_inter.shp.Z
mv ri11oc01.shx   us_inter.shx

☐....5. On each HP and Linux workstation, as the **fxa** user run the following localization command:

cd /awips/fxa/data/localization/scripts
./mainScript.csh +maps

The **./mainScript.csh +maps** localization will create and updated /awips/fxa/data/localizationDataSets/LLL/interstate.bcx file. When the localization completes, stop and restart D2D on the workstation so that the updated interstate.bcx will be read by D2D.

This completes the instructions for updating the /data/fxa/nationalData/us_inter.(dbf|shp.Z|shx) set of interstate map background files.

***** Adding a new /data/fxa/nationalData/routes.(dbf|shp.Z|shx) set of interstate map background files *****

Ira Graffman has made available an optional set of highway map backgrounds. The rd15oc03.(dbf|shp.Z|shx) set of map background files on NOAA1 contains both the free access highways and the toll roads.

The following procedure describes how this new set of highway map backgrounds can be added to an AWIPS system. The file names on NOAA1 versus the file names on AWIPS are:

File name on NOAA1	File name on AWIPS
/pub/maps/**rd15oc03.dbf**	/data/fxa/nationalData/**routes.dbf**
/pub/maps/**rd15oc03.shp.Z**	/data/fxa/nationalData/**routes.shp.Z**
/pub/maps/**rd15oc03.shx**	/data/fxa/nationalData/**routes.shx**

☐....1. Log into the **ds1** server as the **fxa** user. Change directories to the /data/fxa/nationalData directory by entering the command:

cd /data/fxa/nationalData

☐....2. Ftp to NOAA1 and get the new rd15oc03.(dbf|shp.Z|shx) set of map background files by entering the command:

ftp 165.92.25.15

At the ftp login prompt, login using the **ftp** name and then use your email address as the password. Once you are successfully logged into NOAA1 and you have the **ftp>** prompt, enter the following commands:

cd /pub/maps
binary
mget rd15oc03.*
bye

☐....3. Move the new rd15oc03.(dbf|shp.Z|shx) set of map background files into place by entering the commands:

chown fxa:fxalpha rd15oc03.*
chmod 664 rd15oc03.*
mv rd15oc03.dbf   routes.dbf
mv rd15oc03.shp.Z   routes.shp.Z
mv rd15oc03.shx   routes.shx

☐....4. Add the data key for the new routes set of map background files to the LLL-localDataKeys.txt file. On the WNCF AWIPS system, the LLL-localDataKeys.txt file is located in the /data/fxa/customFiles directory so that this file is the same on all servers and workstations. However, some systems may contain workstation/server specific versions of the LLL-localDataKeys.txt file in the /awips/fxa/data/localization/LLL directory.

Since the WNCF system is localized as LWX, here is an example of the /data/fxa/customFiles/**LWX-localDataKeys.txt** file which adds in the routes map backgrounds:

1047| | | | | | |ROUTE |routes |.bcx |interstate and state highways background map

On the WNCF system the 1047 data key is available, i.e. in the OB2 baseline data key 1047 is not defined in the /data/fxa/nationalData/dataInfo.manual file.

Once the LLL-localDataKeys.txt file is created, ensure that it has the proper file ownership and file permissions. Here is how the LWX-localDataKeys.txt file is set up:

chown fxa:fxalpha LWX-localDataKeys.txt
chmod 664 LWX-localDataKeys.txt

☐....5. Add the depict key for the new routes set of map background files to the LLL-localDepictKeys.txt file. On the WNCF AWIPS system, the LLL-localDepictKeys.txt file is located in the /data/fxa/customFiles directory so that this file is the same on all servers and workstations. However, some systems may contain workstation/server specific versions of the LLL-localDepictKeys.txt file in the /awips/fxa/data/localization/LLL directory.

Since the WNCF system is localized as LWX, here is an example of the /data/fxa/customFiles/**LWX-localDepictKeys.txt** file:

1047 |5 |1047 | | |1 |US and State Highways |US and State Highways |1 |1 |1 |khaki3

Once the LLL-localDepictKeys.txt file is created, ensure that it has the proper file ownership and file permissions. Here is how the LWX-localDepictKeys.txt file is set up:

chown fxa:fxalpha LWX-localDepictKeys.txt
chmod 664 LWX-localDepictKeys.txt

☐....6. Add the product button for the new routes set of map background files to the LLL-localProductButtons.txt file. On the WNCF AWIPS system, the LLL-localProductButtons.txt file is located in the /data/fxa/customFiles directory so that this file is the same on all servers and workstations. However, some systems may contain workstation/server specific versions of the LLL-localProductButtons.txt file in the /awips/fxa/data/localization/LLL directory.

Since the WNCF system is localized as LWX, here is an example of the /data/fxa/customFiles/**LWX-localProductButtons.txt** file which adds in the routes map background:

1047 | 1047 |US and State Highways |Highways |1

Once the LLL-localProductButtons.txt file is created, ensure that it has the proper file ownership and file permissions. Here is how the LWX-localProductButtons.txt file is set up:

chown fxa:fxalpha LWX-localProductButtons.txt
chmod 664 LWX-localProductButtons.txt

☐....7. Add the product button for the new routes set of map background files to the LLL-otherBackgroundMenus.txt file. On the WNCF AWIPS system, the LLL-otherBackgroundMenus.txt file is located in the /data/fxa/customFiles directory so that this file is the same on all servers and workstations. However, some systems may contain workstation/server specific versions of the LLL-otherBackgroundMenus.txt file in the /awips/fxa/data/localization/LLL directory.

Since the WNCF system is localized as LWX, here is an example of the /data/fxa/customFiles/**LWX-otherBackgroundMenus.txt** file which adds in the routes map background:

submenu: "Other Maps"

productButton: 1047 # US and State Highways

Once the LLL-otherBackgroundMenus.txt file is created, ensure that it has the proper file ownership and file permissions. Here is how the LWX-lotherBackgroundMenus.txt file is set up:

chown fxa:fxalpha LWX-otherBackgroundMenus.txt
chmod 664 LWX-otherBackgroundMenus.txt

☐....8. On each HP and Linux workstation, as the **fxa** user run the following commands:

cd /awips/fxa/data/localization/scripts
./mainScript.csh -tables

cd /data/fxa/nationalData
shp2bcd x routes /awips/fxa/data/localizationDataSets/LLL/routes.bcx 'ROUTE|]1 ROUTE|#|p-1' '%s-%s'

where **LLL** is the AWIPS localization ID. The shp2bcd command (starting with shp2bcd and
ending with '%s-%s') should be all on one line even though in a printout of this
email the command may appear to be on 2 separate lines. For example the WNCF AWIPS
system is localized as LWX so the command for the WNCF system is:

shp2bcd x routes /awips/fxa/data/localizationDataSets/LWX/routes.bcx 'ROUTE|]1 ROUTE|#|p-1'   '%s-%s'

After the **./mainScript.csh -tables** and shp2bcd commands are run, stop and restart D2D on the
workstation so that the updated files will be read by D2D. The following files should be
updated:

/awips/fxa/data/localizationDataSets/LLL/**localDataKeys.txt**
/awips/fxa/data/localizationDataSets/LLL/**localDepictKeys.txt**
/awips/fxa/data/localizationDataSets/LLL/**localProductButtons.txt**
/awips/fxa/data/localizationDataSets/LLL/**otherBackgroundMenus.txt**
/awips/fxa/data/localizationDataSets/LLL/**routes.bcx**

This completes the instructions for updating the /data/fxa/nationalData/routes.(dbf|shp.Z|shx) set
of interstate map background files.

Email suggestions about this document to Wayne.Martin@noaa.gov.